

## PUBLICATIONS

### *Referred Journal Articles*

- Mooseker, M.S., Pollard, T.D. and **Wharton, K.A.** (1982) Nucleated polymerization of actin from the two ends of microvillar filaments in the intestinal brush border. **J.Cell Biol.** 95:223-233.
- Mooseker, M.S., Bonder, E.M., Grimwade, B.G., Howe, C.L., Keller, T.C.S., Wasserman, R.H. and **Wharton, K.A.** (1982) Regulation of contractility, cytoskeletal structure and filament assembly in brush borders of the intestinal epithelial cells. **Cold Spring Harbor Sympos.Quant.Biology** 46: 855-870.
- Artavanis-Tsakonas, S., Grimwade, B.G., Harrison, R.G., Markopoulou, K., Muskavitch, M.A.T., Schlesinger-Bryant, R., **Wharton, K.A.** and Yedvobnick, B. (1984) The *Notch* locus of *Drosophila melanogaster*. A molecular analysis. **Developmental Genetics** 4: 233-254.
- Wharton, K.A.**, Yedvobnick, B., Finnerty, V.G. and Artavanis-Tsakonas, S. (1985) opa: A novel family of transcribed repeats shared by the *Notch* locus and other developmentally regulated loci in *Drosophila melanogaster*. **Cell** 40: 55-62. PMID: 2981631
- Wharton, K.A.**, Johansen, K.M., Xu, T. and Artavanis-Tsakonas, S. (1985) Nucleotide sequence from the neurogenic locus *Notch* implies a gene product which shares homology with proteins containing EGF-like repeats. **Cell** 43, 567-81. PMID: 3935325
- Ramos, R.G.P., Grimwade, B.G., **Wharton, K.A.**, Scottgale, T.N. and Artavanis-Tsakonas, S. (1989) Physical and functional definition of *Drosophila Notch* locus by P-element transformation. **Genetics** 123, 337-48. PMID: 2555253
- Wharton, K.A.**, Thompsen, G. and Gelbart, W.M. (1991) *Drosophila 60A* gene, a TGF- $\beta$  family member, is closely related to human bone morphogenetic proteins. **PNAS** 88, 2914-18. PMID: 1924384
- Wharton, K.A.**, Ray, R. and Gelbart, W.M. (1993) An activity gradient of *decapentaplegic* is required for dorsal-ventral patterning in the *Drosophila* embryo. **Development** 117, 807-22. PMID: 8330541
- Raftery, L.A., Twombly, V., **Wharton, K.A.** and Gelbart, W.M. (1995) Genetic screens to identify elements of the *decapentaplegic* signaling pathway in *Drosophila*. **Genetics** 139, 241-54. PMID: 7705627
- Wharton, K.A.**, Ray, R.P., Findley, S.D., Duncan, H.E. and Gelbart, W.M. (1996) Molecular lesions associated with alleles of *decapentaplegic* identify residues

necessary for TGF- $\beta$ / BMP cell signaling in *Drosophila melanogaster*. **Genetics** 142, 493-505. PMID: 8852848

Khalsa, O., Yoon, J-W., Torres-Schumann, S., **Wharton, K.A.**, (1998). TGF- $\beta$ /BMP superfamily members, Gbb-60A and Dpp, cooperate to provide pattern information and establish cell identity in the *Drosophila* wing. **Development** 125: 2723-34. PMID: 9636086

Haerry, T. E., Khalsa, O., O'Connor, M. B., **Wharton, K. A.**, (1998). Synergistic signaling by two BMP ligands through the SAX and TKV receptors controls wing growth and patterning in *Drosophila*. **Development** 125: 3977-87. PMID: 9735359

**Wharton, K. A.**, Cook, J., Torres-Schumann, S., de Castro, K., Borod, E., Phillips, D. A., (1999). Genetic analysis of the BMP-related gene, *gbb*, identifies multiple requirements during *Drosophila* development. **Genetics** 152: 629-40. PMID: 10353905

Ray, R. and **Wharton, K. A.** (2001). Context-dependent relationships between the BMPs *gbb* and *dpp* during development of the *Drosophila* wing imaginal disc. **Development** 128, 3913-25. PMID: 11641216

Sinenko, S.A., Kim, E.K., Wynn, R., Manfruelli, P., Ando, I., **Wharton, K.A.**, Perrimon, N. and Mathey-Prevot, B. (2004). *Yantar* is a novel and evolutionary conserved gene involved in *Drosophila* hemocyte differentiation. **Developmental Biology** 273: 48-62. PMID: 15302597

Bangi, E. and **Wharton, K.A.** (2006) Dpp and Gbb exhibit different effective ranges in the establishment of the BMP activity gradient critical for *Drosophila* wing patterning. **Developmental Biology** 295, 178-93. PMID: 16643887

Bangi, E. and **Wharton, K. A.** (2006). Dual function of the *Drosophila* ALK1/ALK2 orthologue, Saxophone, influences the BMP activity gradient critical for wing patterning. **Development** 133, 3295-303. PMID: 16887821

Prabhat, Forsberg, A., Katzourin, M., **Wharton, K.A.** and Slater, M (2007). A Comparative Study of Desktop, Fishtank and Cave Systems for the Exploration of Volume Rendered Confocal Data Sets. **IEEE Transactions on Visualization and Computer Graphics**, epub. 06 Aug 2007. PMID: 18461742  
<http://doi.ieeecomputersociety.org/10.1109/TVCG.2007.70433>

Twombly, V., Bangi, E., Le, V.Q., Malnic, B., Singer, M. and **Wharton, K.A.** (2009). Functional analysis of *saxophone*, the *Drosophila* BMP type I receptor ortholog of human ALK1/ ACVRL1 and ACVR1/ALK2. **Genetics** 183, 563-79. PMID: 19620392

**Wharton, K.A.** and Derynck, R. (2009) TGF- $\beta$  family signaling: Novel insights in development and disease. **Development** 136, 3691-97. PMID: 19855012

Ballard, S., Jarolimova, J. and **Wharton, K.A.** (2010) Gbb/BMP signaling is required to maintain energy homeostasis in *Drosophila*. **Developmental Biology** 337, 375-85. PMID: 19914231

### **Chapters in books**

Artavanis-Tsakonas, S., Grimwade, B., Halpern, M.E., Johansen, K. Markopoulou, K., Ramos, R.G.P. Schlesinger-Bryant, R., **Wharton, K.A.** and Yedvobnick, B. (1985) Molecular biology of genes involved in the neurogenesis of *Drosophila*. Society for Developmental Biology 44th Annual Symposium. ed. Joseph Gall

Yedvobnick, B., Muskavitch, M.A.T., **Wharton, K.A.**, Halpern, M.E., Paul, E., Grimwade, B.G., and Artavanis-Tsakonas, S. (1985) Molecular genetics of *Drosophila* neurogenesis. **Cold Spring Harbor Sympos.Quant.Biology** 50:841-854.

### **Refereed Reviews**

**Wharton, K.A.** and Derynck, R. (2009) TGF- $\beta$  family signaling: Novel insights in development and disease. **Development** 136, 3691-97. PMID: 19855012 (invited review)

Ray, R.P. and **Wharton, K.A.** (2001) Twisted perspective: New insights into extracellular modulation of BMP signaling during development. **Cell** 104, 801-804. (invited review)

**Wharton, K. A.** (1995) How many receptors does it take? **Bioessays** 17, 13-16.

### **Critique of published work**

Science Signaling Editor's Choice for:

Ballard, S., Jarolimova, J. and **Wharton, K.A.** (2010) **Developmental Biology** 337, 375-85  
<http://stke.sciencemag.org/cgi/content/abstract/sigtrans;3/104/ec7?etoc>

Faculty 1000 evaluation of:

Bangi E & Wharton K *Development* 2006 Sep 133 (17) :3295-303  
<http://www.f1000biology.com/article/id/1040007/evaluation>